PUBLIC HEALTH REPORTS

VOL. 32

JULY 13, 1917

No. 28

TRACHOMA AND THE ARMY.

THE DANGERS INCIDENT TO ENLISTING RECRUITS AFFECTED WITH THE DISEASE.

By John McMullen, Surgeon, United States Public Health Service.

Now that our country is engaged in raising a great army, it is our duty to prevent the admission to the Army of recruits who may spread disease.

The history of European wars shows that trachoma has been a grave menace to the efficiency of the fighting forces, invaliding thousands of men and blinding large numbers of its victims. So great has been the prevalence in the armies that trachoma was at one time termed "military ophthalmia" and believed to be confined to soldiers. Various articles of their equipment were condemned as being the cause of the disease.

Trachoma has been said to be "as old as the Nile, the simoom, and the desert." It has an historical importance as an epidemic disease of both military and civil life and has made fearful ravages in practically every European country.

Despite the confusing and contradictory statements in connection with trachoma, the contagious character of this disease is unquestionable.

During the first half of the nineteenth century 1 soldier in every 5 of the Belgian Army is said to have suffered from trachoma. It is alleged that upon the recommendation of a noted authority at that time the trachomatous soldiers were discharged from the army to their homes. This procedure cleared the army of trachoma at that particular time, but carried the disease directly to the homes and the civilian population, where it previously did not exist. This removed all doubt as to the contagiousness of trachoma, which at that time was denied by some, and subsequent cases in the army were isolated in special hospitals, which caused a diminution in the disease.

It is stated that in some countries there were frightful epidemics of trachoma, and that the English, Prussian, Russian, and other armies suffered from the ravages of this disease.

79 (1101)

July 13, 1917 1102

During the Russo-Japanese War trachoma was a formidable enemy to be reckoned with in the Japanese Army and large numbers of troops were isolated and treated for this malady.

Some months since it was reported that an epidemic of trachoma was causing considerable anxiety in France, the disease having been brought to that country by African soldiers and laborers. In the army the disease was checked by the quick isolation of all victims and other drastic measures. Among the civilian population, however, the epidemic was still spreading, especially in the larger cities, and the health authorities were taking every precaution. All persons whose eyes showed any inflammation were examined by specialists and isolated if suspicious.

Statistics from the medical inspection of aliens at United States ports indicate that trachoma is found most extensively among the Syrian, Armenian, Hebrew, Italian, Polish, and Greek races. Trachoma, however, extends more or less over the whole world and exists in many places in the United States as an endemic disease. Lasting as it does for years, it is a constant irritation and discomfort to the patient, impairing his earning capacity and efficiency as a workman and soldier, ruining the life and happiness of entire families and finally terminating in many instances in total blindness. After nearly a lifetime of misery the patient is often seen dwarfed in mind and warped in body with the trichiasis, entropion, and other sequelæ still remaining to harass and irritate the now sightless eyes.

Several years ago the Public Health Service instituted an investigation into the prevalence of trachoma in the United States. Investigations were made among the Indians, and the residents of the Appalachian Mountain range and other sections of the country. The Indians were found to be almost universally infected and on some reservations 90 per cent had trachoma. This survey showed that the disease exists more or less throughout "Appalachian America" and, in some portions the infection was found to be as high as 10 to 12 per cent of the population and in some communities even a higher rate of infection was found. In sections of Minnesota trachoma was found. The disease is also reported from Ohio. Indiana, Kansas, and other States. In fact, it is found to be widely distributed in our country. It is not an uncommon thing to see in one family several generations with trachoma. So prevalent and widespread is the infection in some sections of the United States that the Public Health Service has established and maintains in those sections six ophthalmic hospitals for the treatment of trachoma, which is classed by the Government as a dangerous contagious disease.

These hospitals have now been in operation for several years and, during the past year, a total of 19,530 patients were treated; 1,880

patients were admitted to the hospitals and 1,687 operations were performed. Of this number, 1,153 were under local and 534 under general anesthesia. The records show that at least one-half of our trachoma patients have impairment of vision, ranging all the way from slight defects to total blindness. Ulcer and corneal opacity occur in 25 per cent of the cases; pannus is present in 20 per cent; and photophobia was recorded in 33½ per cent; entropion and trichiasis in 10 to 15 per cent of the cases. Entire families are found suffering from trachoma, including both extremes of life.

The diagnosis of trachoma is still based on clinical evidence, since the causal organism is as yet unknown. Diagnosis, therefore, is in many cases difficult. There are many cases which are found only by careful examination as but few if any symptons may be present at the time of examination and the condition may be said to be latent or dormant. Sooner or later, however, by reason of a foreign body or other excitant, there arises a condition analogous to acute granulations with the watery secretion so characteristic of the disease and the other familiar symptions. In this stage the disease is highly infectious.

Trachoma is transmitted from the sick to the well by the secretion which is conveyed to the healthy eye by means of such infected articles as towels, handkerchiefs, bed linen, etc.

Like most communicable diseases, trachoma spreads where people are crowded together, as in barracks, penal establishments, orphan asylums, etc.

Armies originally get trachoma from the infected civil population in the areas from which recruits are accepted, and give it back to the people, often with interest, when men are discharged who have served their enlistment or become incapacitated.

Trachoma is essentially a chronic disease, and untreated lasts ordinarily the better part of a lifetime. It is a surgical affection and, if anything like satisfactory or permanent results are to be obtained, it must be by properly and skillfully conducted surgical proceedings, and, in many cases, hospital care.

With the proper surgical procedure followed by the after care and treatment, any case of trachoma can be cured, the length of time required to effect a cure depending upon its duration, severity, and other factors. In children, when seen early, the disease is usually readily eradicated and they can return to school in a short time. While occasionally cases of trachoma continue for years with but comparatively small damage to the cornea, others produce corneal complications early and persistently and the eye is lost in a short time.

The results that are being obtained in the 6 Public Health Service trachoma hospitals are exceedingly satisfactory. During the past

July 13, 1917 1104

fiscal year about 1,500 cures have been effected. Adults who have suffered from trachoma for years and were dependent upon their friends or the county for support, some being inmates of the poorhouse, have been relieved, are no longer foci of infection, have taken their places in the community, and are earning a livelihood for themselves and family. Children unable to attend school because of the constant physical suffering and impaired vision are now securing the education which would have been impossible but for timely interference.

There is no lack of evidence that we have a great deal of trachoma in this country, and that it is a public health problem to be dealt with before the disease establishes foci everywhere.

As previously stated, trachoma often exists in a latent or dormant stage, and there is grave danger that recruits may be enlisted suffering with this disease unless the greatest care is exercised.

The eyelids of all soldiers and applicants for enlistment should in every instance be everted, the examination to include the retrotarsal fold, and the condition of the membranes noted in a space on the blank form reserved for this purpose. If the eyelids are not smooth and pink, if there is any redness or secretion, especially in the retrotarsal fold, such cases should be segregated for examination by those trained in the diagnosis of trachoma. An applicant who is found to be suffering with a well-marked trachoma, should not be immediately rejected, but should be given treatment and his trachoma cured. He can then be again examined to determine whether he has resulting visual defects sufficient to cause his rejection. In this way a case of contagious disease will be eliminated and probably a good soldier gained.

Any case of trachoma or suspected trachoma detected among soldiers or sailors should be immediately isolated under care and treatment until cured or until the suspected diagnosis is found to be in error.

POLIOMYELITIS IN JAPAN.

The following information regarding the occurrence of poliomyelitis in Japan has been furnished by the American consul general and was obtained through the courtesy of the Japanese authorities and medical men. While the data are essentially fragmentary, as is true for this disease in most countries, they show that poliomyelitis has been present in Japan and in a measure the degree of the prevalence.

Reports made to the section of pediatrics of the Fourth General Congress of the Japanese Medical Association give the following frag1105 July 13, 1917

mentary information regarding the prevalence of poliomyelitis in Japan:

Fukuoka Prefecture.—During the period from 1904 to 1913, 243 cases of poliomyelitis were admitted to the pediatric clinic of the Imperial University. Most of the cases were of children of from 1 year to 2 years of age. The disease prevailed most severely during the month of May.

Kagawa Prefecture.—In 1913 a small epidemic occurred, chiefly affecting children.

Kumamoto Prefecture.—An epidemic of poliomyelitis with 28 reported cases occurred in 1912, the greatest prevalence being in May and June.

Kyoto Prefecture.—Since the year 1911 poliomyelitis has prevailed sporadically but on a small scale and within a restricted area. The greatest prevalence has been observed in June and July. Children of from 1 year to 2 years have been found most susceptible to the infection.

Kyushu Prefecture.—No severe epidemic has been reported.

Niigata Prefecture.—From March, 1912, to the close of 1913, 22 cases of poliomyelitis were treated at the Niigata Medical College. Most of these cases were in children between the ages of 1 year and 2 years. The greatest prevalence was during the period from April to August.

Okayama Prefecture.—In 1912 an outbreak of poliomyelitis occurred, the period of prevalence being the months of May and June. More than 500 children were attacked and a comparatively large number of cases occurred among adults.

Tokyo.—During the past 26 years 449 cases of poliomyelitis have been diagnosed at the Imperial University. The disease prevailed most severely during the months of June, July, and August, and among children between 1 year and 2 years of age.

In July and August, 1916, five cases of poliomyelitis were notified in Japanese and foreign children at the summer resort of Karuizawa.

EXPERIMENTAL TYPHUS FEVER IN GUINEA PIGS.

A DESCRIPTION OF A SCROTAL LESION IN GUINEA PIGS INFECTED WITH MEXICAN TYPHUS.

By M. H. NEILL, Passed Assistant Surgeon, United States Public Health Service.

It is well known that the intraperitoneal inoculation of guinea pigs, with 2 to 4 cc. of blood containing the virus of typhus fever, is followed by a rather characteristic elevation of temperature which will be observed about 10 days subsequently. Not many descriptions of pathological changes as a result of the above procedure have

July 13, 1917 1106

been reported. Bachr and his cowerkers consider certain changes in the spleen, "which is enlarged and congested, with its malpighian bodies prominent," as typical of typhus fever in the guinea pig. Aside from the above, most workers seem rather to have insisted on the absence of gross lesions, due to the typhus virus, in these experimental animals.

The striking similarity, in many respects, of typhus fever and Rocky Mountain spotted fever, led to the examination of the scrotums of typhus-fever guinea pigs, since very definite lesions of the scrotal tissues are almost uniformly present in the former disease. These changes have been described by Ricketts ² and other workers.

While the observations recorded in this paper have been in progress there has been ample opportunity for comparative study, as a strain of Rocky Mountain spotted fever has been carried on by transfer from guinea pig to guinea pig.

Lest there be any possibility of misunderstanding, it seems desirable to state that the nonidentity of the two diseases has apparently been thoroughly established by immunological studies.

The guinea pigs on which the observations were based were those inoculated with Mexican typhus directly from human cases or from other guinea pigs or monkeys in which the strains of Mexican typhus were being propagated. The observations were made during 1916 and 1917.

A series of guinea pigs infected with a strain of the so-called "endemic typhus" or Brill's disease, which had been propagated in monkeys and guinea pigs for several years, was examined before attention was focused on the scrotal lesions. While it is possible that a mild type of the lesion may have been present, it certainly was not sufficiently conspicuous to attract attention.

In well-developed male guinea pigs, which had been intraperitoneally injected with the Mexican typhus virus, the following changes have been observed: From 9 to 15 days after inoculation, the temperature of the animal becomes elevated to from 40.5° to 41° C., and if the scrotum, with the testicles in place, be examined, a definite swelling is observed. If the skin be of a light color, some redness may be noted. These external changes subside in a few days. If the animal be killed when the fever and scrotal changes are at their height, dissection reveals the following gross findings: The skin of the scrotum looks apparently normal, but if it be carefully dissected from the tissues immediately beneath, definite hemorrhages appear in the cremasteric fascia, just external to the parietal laminæ of the tunica vaginalis. If these structures be incised and the testicle and epididymis exposed, hemorrhages of a similar nature will be noted

¹ Olitsky, Denzer and Husk, J. Am. M. Ass., 1917, vol. 68, No. 16, p. 1167.

³ J. Am. M. Ass., 1906, 47, p. 33.

immediately beneath the visceral laminæ of the tunica vaginalis. The extent of these hemorrhages varies, from a few minute petechiæ to nearly complete envelopment of the testicles by hemorrhagic areas. If the animal be examined at the height of the process, i. e., one to two days after the swelling is first noted, the lesions above described are indistinguishable in their gross appearances from the lesions of Rocky Mountain spotted fever at the same stage of development of the disease, that is, one or two days after the swelling of the scrotum is first noted. In the spotted fever animals, in contradistinction to the typhus animals, the disease becomes progressively more severe. Hemorrhages into the skin of the scrotum take place, and in some cases typical necroses of the scrotum, paws, and ear tips are observed before the death of the animal, which usually follows. On the other hand, the lesions of typhus fever rapidly clear up and soon the animal is as well as ever.

Twenty-six out of 37 male guinea pigs killed at the height of the febrile reaction showed the lesions to be as described. These animals represent several strains of typhus received from El Paso, Tex., and Laredo, Tex., this year.

Lecount 1 and Wolbach 2 have emphasized the significance of vascular lesions in the pathology of Rocky Mountain spotted fever, both in human cases and in guinea pigs. These lesions consist of various grades of reaction to injury of the cells of the endothelium, i. e., endarteritis, and of rather peculiar and characteristic perivascular accumulations of cells.

E. Frankel,³ Aschoff,⁴ and Poindecker,⁵ and apparently several other workers whose publications are not now available, have described certain histological changes in typhus fever, especially as regards the exanthem. These writers all describe as characteristic, lesions of the smaller arteries consisting of necrosis of the intima and the perivascular accumulation of cells among which, as in spotted fever, the mononeuclear elements predominate.

In the present study the writer reports that: In guinea pigs infected with Rocky Mountain spotted fever and typhus fever, and killed at about the same stage of development of the lesions, sections of the testicles, epididymis, and their envelopes revealed similar changes. They were as follows:

A. Subperitoneal hemorrhages, presumably due to,

B. Vascular lesions, characterized by degeneration of the intima, proliferation of the endothelium and connective tissue of the vessel walls. Pronounced perivascular infiltration, as noted above, was

¹ Journal of Infectious Disease, 1911, vol. 8, p. 421.

² Journal Med. Research, 1916, vol. 34, p. 122.

^{*} Münch. Med. Wehnschr., 1914, vol. 61, p. 57.

⁴ Med. Klin, 1915, p. 798.

[•] Münch. Med. Wchnschr., 1916, vol. 63, No. 5, p. 176.

July 13, 1917 1108

found in both diseases. This consisted chiefly of cells of the lymphocyte series and of endothelial leucocytes. Polyneuclear leucocytes were present, but distinctly in the minority. The changes were particularly abundant in the small vessels. Thromboses were occasionally observed in the early lesions.

The lesions in spotted fever showed more necrosis, exudation, and, in older specimens, more proliferation in the vessel walls than occurred in the typhus-fever animals.

Summary.

- 1. Definite, gross, and minute pathological changes in the genitals of male guinea pigs reacting to Mexican typhus-fever blood have been described. The gross lesions occurred in about 70 per cent of such animals examined.
 - 2. These depend on lesions of the blood vessels.
- 3. The lesions are similar in process to, but milder in character than, those occurring in guinea pigs infected with Rocky Mountain spotted fever.

PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

CURRENT STATE SUMMARIES.

California Report for the Week Ended July 7, 1947.

The California State Board of Health reported concerning the status of preventable diseases in California for the week ended July 7, 1917, as follows: The cases of reportable diseases, with the exception of typhoid fever and cerebrospinal meningitis, were greatly reduced during the week. Of typhoid fever, 21 cases were notified from scattered points in the State. Four cases of cerebrospinal meningitis occurred, 2 in San Diego, 1 each in San Francisco and Placer County. One case of dengue was reported in Kern County. Mumps cases were mostly in the southern part of the State. Diphtheria was notified principally in northern California. Of scarlet fever 53 cases were notified, mostly in San Francisco and Los Angeles.

The details of notifiable disease cases reported in the State during the week ended June 30 are as follows:

Cerebrospinal meningitis	4	Pneumonia	30
Chicken pox	60	Poliomyelitis	1
Diphtheria	38	Scarlet fever	68
Erysipelas	10	Smallpox	10
German measles.		Syphilis	12
Gonococcus infection		Trachoma	1
Malaria.	6	Tuberculosis	119
Measles	266	Typhoid fever	20
Mumps	417	Whooping cough	52

CEREBROSPINAL MENINGITIS.

Massachusetts.

Collaborating Epidemiologist Kelley reported that during the week ended July 7, 1917, cases of cerebrospinal meningitis were notified in Massachusetts as follows: Boston, 1; Northampton, 1; Pittsfield, 2.

CEREBROSPINAL MENINGITIS—Continued.

State Reports for May, 1917.

Place.	New cases reported.	Place.	New cases reported.
Alabama: Jefferson County Lee County. Monroe County Walker County Total. Connecticut: Fairfield County— Bridgeport Stratford. Hartford County— Hartford Manchester.	1	Connecticut—Continued. Hartford County—Continued. New Britain. Plainville. South Windsor. Windsor New Haven County— Naugatuck. New Haven. Waterbury. Total. Washington: King County.	4 2 1 2 1 4 2 48

City Reports for Week Ended June 23, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio. Atlantic City, N. J. Baltimore, Md. Binghamton, N. Y. Beston, Mass. Bridgeport, Conn. Buffalo, N. Y. Chicago, Ill. Cincinnati, Ohio. Cleveland, Ohio. Columbus, Ohio. Davenport, Iowa. Dayton, Ohio. Dubuque, Iowa. Elgin, Ill. Elizabeth, N. J. Erie, Pa. Harrisburg, Pa. Hadianapolis, Ind. Jersey City, N. J. Kenosha, Wis.	1 1 1 10 1 5 1 1 1	1 7 2	Philadelphia, Pa	1 10 4 12 14 11 12	5 2 2 1 1 1 1 8 4

DIPHTHERIA.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 1117.

ERYSIPELAS.

City Reports for Week Ended June 23, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Binghamton, N. Y. Boston, Mass. Buffalo, N. Y. Chicago, Ill. Cincinnati, Ohio. Cleveland, Ohio. Dayton, Ohio. Detroit, Mich. Duluth, Minn El Paso, Tex. Harrisburg, Pa. Kalamazoo, Mich. Lancaster, Pa. Los Angeles, Cal. McKeesport, Pa. Milwaukee, Wis. Newark, N. J.	3 22 1 4 2 4 1	1		1 6 13 2 1 1 10 3 1 1	

MALARIA.

Alabama Report for May, 1917.

Place.	New cases reported:	Place.	New cases reported.
Alabama: Blorns County. Bullock County. Butler County. Calboun County. Choctaw County. Clarke County. Cressbaw County. Cressbaw County. Cressbaw County. Ecomabia County. Etowah County. Geneva County. Genero County. Greene County. Jefferson County.	3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Alabama—Continued. Lawrence County. Madison County. Marengo County. Marion County. Mobile County. Momroe County. Perry County. Pikse County. Shelby County. Sunter County. Talapoesa County. Total.	1

City Reports for Week Ended June 23, 1917.

Piace.	Cases.	Deaths.	Place.	Cases.	Deaths.
Birnaingham, Ala		1 .	Leng Branch, N. J. Memphis, Tenn. Mobile, Aia. Newark, N. J. Washington, D. C.		

¹ The reason that Birmingham had so many more cases of malaria reported than any other city is not because the disease is more prevalent in Birmingham than in other cities of Alabama and neighboring States, but undoubtedly because of the successful effects the health department has made in securing the cooperation of the practicing physicians in reporting cases.

MEASLES.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 1117.

PELLAGRA. State Reports for May, 1917.

Place.	New cases re- ported.	Place.	New cases re- ported.
Alabama: Autauga County Barbour County Butler County Calboun County Chambers County Cherokee County Choctaw County Clarke County Clay County Cleburne County Coffee County Coffee County Colbert County Consa County Cosa County Dallas County Dallas County Dallas County Tessambia County Essambia County Fayette County	24151111261222	Alabama—Continued. Lee County Limestone County Macon County Maduson County Mohie County Mohie County Mohie County Perry County Pickens County Pickens County Pickens County Tike County Randolph County St. Clair County Talladega County Talladega County Tuscalosa County Tuscalosa County Walker County Washington County Wilcox County Total	7 1 35 1 1 1 2 6 6 1 1 3 7 14 15

1112

PELLAGRA-Continued.

City Reports for Week Ended June 23, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Birmingham, Ala. Buffalo, N. Y Charleston, S. C El Paso, Tex Hagerstown, Md Kalamazoo, Mich Memphis, Tenn	1 1	5 2	Mobile, Ala. New Orleans, La. Roanoke, Va. Wilmington, N. C. Winston-Salem, N. C. Worcester, Mass.	1	3

¹ The reason that Birmingham had so many more cases of pellagra reported than any other city is not because the disease is more prevalent in Birmingham than in other cities of Alabama and neighboring States, but undoubtedly because of the successful efforts the health department has made in securing the cooperation of the practicing physicians in reporting cases.

PLAGUE.

California—Plague-Infected Squirrels Found.

Passed Asst. Surg. Williams reported the finding of plague-infected ground squirrels in California as follows: In Alameda County during the period from June 16 to 27, 1917, 5 infected squirrels were found in township 2, all having been found within a radius of 4 miles of Altamont. In Santa Cruz County, on June 27, 1917, a plague-infected squirrel was found 9 miles east of Watsonville, on the G. F. Silliman ranch.

PNEUMONIA. City Reports for Week Ended June 23, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio. Boston, Mass Braddock, Pa. Cambridge, Mass. Chelsea, Mass. Chicago, Ill. Cleveland, Ohio. Detroit, Mich. Duluth, Minn. Everett, Mass. Fall River, Mass. Fitchburg, Mass. Fitchburg, Mass. Fitchburg, Mass. Los Angeles, Cal. Lynn, Mass. Los Angeles, Cal. Lynn, Mass. McKeesport, Pa.	14 1 3 73 10 10 1 2 2 2 4 1 3	2 57 23 21 3	Memphis, Tenn Muscatine, Iowa. Newark, N. J. Newport, Ky. North Adams, Mass. Northampton, Mass. Philadelphia, Pa. Pittsburgh, Pa. Reading, Pa. Reading, Pa. Rochester, N. Y. San Diego, Cal. Schenectady, N. Y. Somerville, Mass. Terre Haute, Ind. Wichita, Kans. Wilmington, Del. Worcester, Mass.	1 16 2 1 1 40 11	229 160 3 1 1 5 5 1 1 1 1 1 1

POLIOMYELITIS (INFANTILE PARALYSIS).

Illinois.

The State Board of Health of Illinois reported that during the period from July 3 to 9, 1917, four cases of poliomyelitis were notified in Illinois; one case each in Chicago, Joliet, Zion City, and Melrose Township, Adams County.

POLIOMYELITIS (INFANTILE) PARALYSIS—Continued.

Massachusetts.

Collaborating Epidemiologist Kelley reported that during the week ended July 7, 1917, cases of poliomyelitis were notified in Massachusetts as follows: Haverhill 2, Medford 1, Beverly 1, Springfield 1, Lowell 1.

_ Minnesota.

Collaborating Epidemiologist Bracken reported that during the month of June, 1917, four cases of poliomyelitis were notified in Minnesota, making a total of 21 cases reported since January 1, 1917.

New York-New York City.

The Department of Health of New York City reported that during the month of June, 1917, 66 cases of poliomyelitis were notified in the city of New York, making a total of 99 cases reported since January 1, 1917. In 1916 the number of cases reported during June was 380, with a total of 409 cases notified from January 1 to June 30.

Vermont.

Collaborating Epidemiologist Dalton reported the occurrence of cases of poliomyelitis in Vermont as follows: In the town of Barre, from June 16 to July 7, 4 cases; in Fayston on July 7, 1; in Montpelier, from June 19 to July 7, 29; in Waitsfield, from June 16 to July 7, 6; in Washington, from June 27 to July 7, 2 cases.

State Reports for May, 1917.

Place.	New cases reported.	Place.	New cases reported.
Alabama: Cleburne County Jefferson County Tuscaloosa County Total Connecticut: Fairfield County Stamford Hartford County Southington New Haven County Branford	1 1 3 3 1 1	Connecticut—Continued. New Haven County—Continued. Nangatuck. New Haven. Total. Hawaii: Oahu— Honolulu Washington: Island County— Langley.	1 1 1

City Reports for Week Ended June 23, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Chicago, Ill Cincinnati, Ohio. Cleveland, Ohio Covincton, Ky. Haverhill, Mass Jersey City, N. J	1 1 4		Newark, N. J New York. N. Y. Portsmouth, N. H. St. Louis, Mo Worcester, Mass	1	1

RABIES IN ANIMALS.

City Report for Week Ended June 23, 1917.

During the week ended June 23, 1917, 4 cases of rabies in animals were reported at Detroit, Mich.

ROCKY MOUNTAIN SPOTTED FEVER.

Nevada—Humboldt County.

The State Board of Health of Nevada reported July 10, 1917, that five cases of Rocky Mountain spotted fever had been notified in Humboldt County, Nev.

Washington Report for May, 1917.

During the month of May, 1917, 3 cases of Rocky Mountain spotted fever were reported at Odessa, Lincoln County, Wash.

SCARLET FEVER.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 1117.

SMALLPOX.

Minnesota.

Collaborating Epidemiologist Bracken reported that during the week ended July 7, 1917, 5 new foci of smallpox infection were reported in Minnesota, cases of the disease having been notified as follows: Chisago County, Rush City, 17 (cases occurred in May and June); Crow Wing County, Manganese, 1; Polk County, Angus Township, 1; Todd County, Moran Township, 1; Washington County, Marine, 1.

Miscellaneous State Reports.

	Cases.	Deaths.	Place.	Cases.	Deaths.
Alabama (May 1-31): Calhoum County Calhoum County Etowah County Jackson County Limestone County Macon County Madison County Marshall County Montgomery County Talladega County Talladega County Total Connecticut (May 1-31): Fairfield County Norwalk Hartford County Berlin Bristol Hartford New Britain Southington Litchfield County Torrington Winchester New Haven County New Haven Oxford Southbury Wallingford Waterbury New London County Waterbury New London County Waterbury New London County Groton	24 55 13 4 4 111 11 15 12 2 22 2 1 1 1 2 2 2 2 4 1 1 8 8 1		Washington (May 1-31): Chelan County— Wenatchee Clark County— Ridgefield King County— Seattle Kitsap County— Charleston Kititas County— Ellensburg Klickitat County Pacific County Pend Oreille County Pierce County— Tacoma Snohomish County Spokane Walla Walla County— Watsburg Whatcom County— Bellingham Yakima County North Yakima Toppenish.	1 2 2 1 1 1 1 1 2 2 5 5 1 3 3 3 1 2 2	

SMALLPOX—Contibued.

City Reports for Week Ended June 23, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio. Alton, III. Austin, Tex Cairo, III. Canton, Ohio Chicago, III. Cincinnati, Ohio. Cleveland, Ohio Ceffeyville, Kaus. Columbus, Ohio. Covingtom, Ky Danville, III Dayton, Ohio. Detroit, Mich. Dubuque, Iowa. Duluth, Minn Erie, Pa Evansville, Ind. Fitchburg, Mass. Filint, Mich. Fort Worth, Tex Green Bay, Wis. Indianapolis, Ind. Kansas City, Kans. Kansas City, Kans.	222 33 11 17 77 11 11 11 11 63 31 11 12 4 31 16 6	2	Minneapolis, Minn. Muscatine, Iowa Nashville, Tenn New Castle, Pa. New Orleans, La. Oklahoma City, Okla Omaha, Nebr. Philadelphia, Pa Pittsburph, Pa. Portland, Oreg Quincy, Ill Roanoke, Va Rock Island, Ill St Joseph, Mo. St Louis, Mo. Salt Lake City, Utah Sioux City, Iowa Springfield, Ill Springfield, Ohio.	22 1 3 1 1 7 2 2 1 2 4 4 1 1 2 2 1 2 2 1 2 2 1 1 1 1	Deaths.
Kenosha, WisLittle Rock, ArkMadison, WisMemphis, TennMilwaukee, Wis	2 4 1 6	•	Topeka, Kans Wichita, Kans. Worcester, Mass. Zanesville, Ohio	3 2	2

TETANUS.

City Reports for Week Ended June 23, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Boston, Mass Charleston, S. C Chicago, Ill Danville, Ill Evansville, Ind	1 1	i	Long Beach, Cal. Newark, N. J. Pittsburgh, Pa. St. Louis, Mo. Wheeling, W. Va.	3	1

TUBERCULOSIS.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 1117.

TYPHOID FEVER.

State Reports for May, 1917.

Place.	New cases reported.	Place.	New cases reported.
Alabama: Bibb County. Butler County. Chitoa County. Choctaw County. Clarko County. Codice County. Conecuh County. Covington County. Cremanw County. Cremanw County. Coulinam County Dallas County Dallas County	111111111111111111111111111111111111111	Alabama—Continued. Elmore County. Escambia County. Etowah County. Franklin County. Greene County. Hale County. Jefferson County. Lamar County. Limestone County Madison County. Marengo County. Marengo County.	3 1 1 82 1 1 1 1 5

TYPHOID FEVER—Continued.

State Reports for May, 1917—Continued.

Place.	New cases reported.	Place.	New cases reported.
Alabama — Continued. Mobile County. Montgomery County. Morgan County. Pike County. Randolph County. Russell County.	19 3 1 2 2 2 2 2 1 1 8 3	Hawaii—Continued. Kauai— Hanalei District. Maui— Hana District. Oahu— Honolulu	1
Shelby County	2 1	Total	17
Sumter County. Talladega County Tallaposa County Tuscalossa County Walker County. Washington County Wilcox County Winston County	1 8 3 5 4 4 1 1	Washington: Benton County Prosser Chelan County— Wenstchee Clark County— Vancouver	1 2 1
Total	189	Franklin County. King County.	2 1
Connecticut: Fairfield County— Bridgeport. Danbury. Greenwich. Norwalk. Hartford County— Enfield. Glastonbury. Hartford. Litchfield County— Canaan. New Haven. New Haven. New Haven. New London County— Griswold. Jowett City. Windham County— Woodstock. Total. Hawaii: Hawaii— Hamakua District. Hilo. Puna District.	1 1 1 1 2 1 5 2 3 1 23	Seattle Lincoln County Davenport Odessa Okanogan County Conconully Pierce County Tacoma Skagit County Shagit County Edmonds Everett Index Spokane County Spokane County Spokane Stevens County Wahkiakun County Walla Walla County Whitman County Colfax Yakima County Total	1 2 1 1 15 15

City Reports for Week Ended June 23, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio Akron, Ohio Albany, N. Y. Baltimore, Md Beaver Falls, Pa Birmingham, Ala Boston, Mass Bridgeport, Conn Brockton, Mass Cambridge, Mass Charleston, S. C. Chelsea, Mass Chicago, Ill Cleveland, Ohio Columbus, Ohio Columbus, Ohio Danville, Ill Dayton, Ohio Detroit, Mich Duluth, Minn East Orange, N. J. Erie, Pa Fall River, Mass Filnt, Mich Fort Worth, Tev	2 6 6 1 13 4 4 1 1 1 7 7 3 2 1 1 13 13 4 4 6	1 1 2 2 1	Hamilton, Ohio Indianapolis, Ind. Kansas City, Mo. Little Rock, Ark Long Branch, N. J. Los Angeles, Cal. Lowell, Mass Lynchburg, Va. Madison, Wis. Memphis, Tenn. Milwaukee, Wis Minneapolis, Minn. Mobile, Ala. Nashville, Tenn New Ark, N. J. New Haven, Conn New Orleans, La. New Orleans, La.	1 1 1 2 2 4 3 1 1 3	1 1 1 1 1 1 3 3 3

TYPHOID FEVER—Continued.

City Reports for Week Ended June 23, 1917—Continued.

		Schenectady N V		
Pawincket, R. I. 1 Philadelphia, Pa. 32 Pittsburgh, Pa. 2 Plainfield, N. J. 1 Portland, Me. 1 Richmond, Va. 4 Rocky Mount, N. C. 1 St. Louis, Mo. 3 Salt Lake City, Utah 10 San Francisco, Cal 1	2 1	Troy, N. Y. Washington, D. C. Williamsport, Pa. Wilmington, Del Winston-Salem, N. C. Worcester, Mass	1 1 5 1 3 2 1	2

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

State Reports for May, 1917.

2	ases repor		Cases reported.				
State.	State. Diphtheria. Measles. Scarlet fever.		State.	ate. Diph-theria.		Scarlet fever.	
AlabamaConnecticut	21 142	2,050 1,430	25 140	flawaii	3 36	16 201	1 68

City Reports for Week Ended June 23, 1917.

	Popula- tion as of July 1, 1916	tion as of Total July 1, 1916 deaths		theria.	Mea	Measles.		Scarlet fever.		ber- osis.
City.	by U.S. all	from	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Over 500,000 inhabitants: Baltimore, Md Boston, Mass Chicago, Ill Cleveland, Ohio. Detroit, Mich Los Angeles, Cal New York, N. Y Philadelphia, Pa St. Louis, Mo From 300,000 to 500,000 inhabitants: Buffalo, N. Y Cincinnati, Ohio Jersey City, N. J Milwaukee, Wis Minneapolis, Minn Newark, N. J New Orleans, La San Francisco, Cal Seattle, Wash Washington, D. C From 200,000 to 300,000 inhabitants:	674,073 571,784 503,812 5,602,841 1,709,518 579,090 757,309 468,358 410,476 306,345	160 242 629 181 184 1,339 462 193 189 138 123 74 92 91	4 74 181 36 97 7 245 60 23 75 14 11 8 19 9 9 22 6 13 1	7 17 19 15 8 11 14 3	166 192 459 69 22 79 843 175 149 73 39 11 58 68 21 38	2 3 4 1 3 1 19 1 2 2	14 26 246 11 81 18 113 17 14 71 10 5 13 45 8 17 2 6	2 13 1 1 2 2	56 54 243 45 29 56 248 94 28 51 31 27 21 29 32 17 9	20 32 56 22 14 25 221 52 18 16 6 8
ants: Columbus, Ohio Denver, Colo. Indianapolis, Ind Kansas City, Mo Portland, Oreg. Providence, R. I Rochester, N. Y	297, 847 295, 465 254, 960	71 42 74 65	5 9 9 4 12 3	1	5 25 74 17 7 6 99	12	3 1 11 13 5 4 18		8 14 65 5	5 15 11 4 10 7

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS— Continued.

City Reports for Week Ended June 23, 1917—Continued.

	Popula- tion as of July 1, 1916	Total deaths	Diph	theria.	Me	asles.		arlet ver.	Cu	ıber- losis.
City.	(estimated by U.S. Census Bureau).	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 100,000 to 200,000 inhabit-										
ants:	104, 199				36	1	. 4	ł		. [
Albany, N. Y. Birmingham, Ala	181.762	92			14	i	l i		. 34	1
Bridgeport, Conn Cambridge, Mass. Camden, N. J Dayton, Ohio Fall River, Mass Fort Worth, Tex. Grand Rapids, Mich Lawrone Mass	121, 579 112, 981	28 22	5 3		8	1 1	1 2 2 2		. 4	1 3
Cambridge, Mass	112,981	22	3		18	i	2	·	. 8	1 .
Dayton Ohio	106, 233 127, 224	40	8 1		18 27		8		. 3	ļ,
Fall River, Mass	127, 224 128, 366	39	1 2		27 37	2	1		. 15	
Fort Worth, Tex		26	2		l					
Grand Rapids, Mich	128, 291 100, 560	30	2 3		37		·		. 1	1 1 6 6 2 2 5 1 1 3 2
Lawrence, Mass	113, 245	19	17	i	6				5 7	1 1
Lowell, Mass. Lynn, Mass Memphis, Tenn Nashville, Tenn	102 425	31 19	'n	- 1	11		7	i	6	1 3
Memphis, Tenn	102,425 148,995	60					3		29	1 :
Nashville, Tenn	117,057	31			1		ĭ		. 29	l i
New Bedford, Mass New Haven, Conn Oakland, Cal. Omaha, Nebr	118, 158	41		1	32				. 6	1 6
New Haven, Conn	149,685		3	1	72				- 8 - 3 - 1	6
Omeho Nobr	198, 604 165, 470	39 50	3 1		23		3		. 3] 5
Reading Pa	109, 281	21	5.		1		15 3	· · · · · ·	4	
Richmond, Va	156,687	-54			13				3	1 1
Omana, Nebr Reading, Pa Richmond, Va Salt Lake City, Utah Springfield, Mass Syracuse, N. Y Tacoma, Wash Toledo, Ohio. Trenton, N. J Worcester, Mass. m. 50,000 to 100,000 inbabit.	117,399	25 37	1		3		16		.	l ì
Springfield, Mass	105, 942	37	6	1	18		5		. 9	1 3
Syracuse, N. Y	155,624	42	2	1	50		12		. 3	2
Tacoma, Wash	112, 770		1 4	····i	 51		2 21		· ····;•	11
Trenton, N. J.	191,554 111,593	68 37	2	•	4		1	1	1 5	11
Worcester, Mass.	163, 314	42	7		8	1	11		5 5	3
					ŭ	-				"
nts: Akron, Ohio	55,625		25	- 1	9				12	
	63, 505	11	2 '		ĭ		3		12	
Altoona, Pa	58, 659		2		4				1	
Atlantic (iny, N. J	57,000		1		22	;			1	1
Bayonne, A. J.	69, 393		!		1				2	
Altona, Pa. Atlantic i iy, N. J. Bayonne, N. J. Berkeiey, al. Binghamton, N. Y. Brockton, Mass. Canton, Ohio	57,653 53,973	8 .	4		8 19		1 3	• • • • •		:
Brockton, Mass	67,449	23 17			19 8		1		3	1 2
Canton, Ohio. Charleston, S. Covington, Ky Duluth, Minn.	60.552	14	1 7	3	2		î		1	
Charleston, S.	00,734	26						 		3 5
Covington, Kerming	57,144	15	1 .	-			3		1	5
Dillustr, Minn.	1.4, 195	14	2 .		30	1	2		2	
El Pago Toy	10.090	21	4		52		2		3	2 9
Frie. Pa	63, 195 75, 195	56	2		4 5		1 8	· · · · · ·		9
Evansville, Ind	76,678	16	2		.,		0 1		4	20 4
Flint, Mich	54,772	10	2		26		13		6	i
Fort Wayne, Ind	76,183	22	2 .		26 23		13 2		21	.
Duluth, Miam Elizabeth, N. J El Paso, Tex Erie, Pa Evansville, Ind Plint, Mich Fort Wayne, Ind. Harrisburg, Pa. Hoboken, N. J Johnstown, Pa Kansas City, Kans Lancaster, Pa. Little Rock, Ark Malden, Mass	72,015	29	3		12		1		3	
Tohnstown Po	77,214	14	2		12		4 7		6 3 2	1
Kansas City, Kans	68, 529 99, 437	24 .	3		12		6		3	i
Lancaster, Pa	50,853		9		8		3	• • • • • •	2	1
Little Rock, Ark.	57,343	9 .								• • • • • • • • • • • • • • • • • • •
Malden, Mass Manchester, N. H	51.155	7	5 .] .	30		2			• • • • • •
Mobile, Ala	78, 283 58, 221	28	1	1	2 2		1 .		1	2
	53, 794	31 13 .	1 .		3	• - • • • •	• • • • • •			3
Norfolk, Va	89,612	10 .			3		• • • • • • • • • • • • • • • • • • • •	• • • • • •	4	•••••
Oklahoma City, Okla	92, 943	17							7	3
Passaic, N. J.	71, 744	17	10	2 1]	2			3
Portland Mo	59,411 .		1 !	1 .	.ا.يي.ا] .			2 3 3 1 2
Norfolk Va. Oklahoma City, Okla. Passaic, N. J. Pawtucket, R. I. Portland, Me. Rockford, Ill. Sacramento, Cal. Saginaw Mich.	63,867	19	2 .	:-	19	-			ا.یِ	2
Sacramento, Cal	55, 185 66, 895	13	1 .	1	23		2	1	1	•••••
Saginaw, Mich.	55, 642	23	2		3		7	•••••	2	3
Saginaw, Mich St. Joseph, Mo San Diego, Cal	85, 236	28 23 18	4 .		8 . 3 . 3		2 2 7 5		2	3
San Diego, Cal	53,330	33 .			33				9	3 3 3 3 2
Schenectady, N. Y. Sioux City, Iowa. Somerville, Mass.	99,519 57,078 87,039	10	3 .		55 .				5	ž
							3 .			

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended June 23, 1917--Continued.

	Popula- tion as of July 1, 1916	Total deaths	Diph	theria.	Mea	sles.		rlet er.	Tul culo	ber- osis.
City.	(estimated by U.S. Census Bureau).	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 50,000 to 100,000 inhabit-										
onteContinued	68,946	16	1		17		3		1	
South Bend, Ind	61.120	9	1 3	1	9		1	•••••		
Springfield, Ohio	51,550 66,083	15 39	3		16 9		1		2	:
Trov. N. Y	77,916		i		11		2 3		6	
Troy, N. Y. Wichita, Kans. Wilkes-Barre, Pa. Wilmington, Del.	77, 916 70, 722 76, 776 94, 265	18	····i		1 32		1		2 7	
Wilmington, Del	94, 265	28	2				2		3	
York, Pa rom 25,000 to 50,000 inhabit-	51,656		1		3					
from 25,000 to 50,000 inhabit-	•		1			l				
Alameda, Cal	27,732	3	ļ <u>.</u> .		3		1			
Alameda, Cal. Austin, Tex. Bellingham, Wash Brookline, Mass.	34.814	11 6	1		····i					
Brookline. Mass	32, 985 32, 730 27, 632	4	2		4				i	
Butler, Pa Butte, Mont	27,632	10	1		1					
Butte, Mont	43,425 46,192	7	1 3		1 4		3		·····2	
Chelsea, Mass Chicopee, Mass Cumberland, Md. Danville, Ill.	29,319	7	2	i	2		i		Ĩ	
Cumberland, Md	26.074	3	1		3				1	
Danville, Ill	52,261 48,811	10			7 5				1	-
Davenport, Iowa	39, 873			i		1	3		i	
East Chicago, Ind East Orange, N. J Elgin, Ill	39,873 28,743				6		2		1	
East Orange, N. J.	42, 100	6 9			12 2		2		2	
Eigin, III	28, 203 39, 233	6	3		9	1			5	
Everett, Wash	35,486	4			2		4		l	
Fitchburg, Mass	41,781	6	1		32		3		2	
Green Bay Wis	41,863 29,353	11 12	1							
Eigin, III. Everett, Mass. Everett, Wash. Fitchburg, Mass Galveston, Tex. Green Bay, Wis. Hagerstown, Md Hamilton, Ohio. Haverhill, Mass Jackson, Mich Kalamazoo, Mich	25,679	Ī			3					
Hamilton, Ohio	40, 496 48, 477	7	1 1		1		1		2 4	
Jackson, Mich	35, 363	15	i		28		2		2	
Kalamazoo, Mich Kenosha, Wis. Kingston, N. Y Knoxville, Tenn La Crosse, Wis.	48,886	25	2		59		1			
Kenosha, Wis	31,576	4 7			15 6		3			
Knoxville. Tenn	26,771 38,676	·			2		i		3	
La Crosse, Wis	31,677	11	1				1		1	ĺ
Lexington, Ky. Lima, Ohio. Lincoln, Nebr. Long Beach, Cal.	41,097	10 8	3	····· <u>·</u>	2 2		3			
Lincoln, Nebr	35,384 46,515 27,587	17	2		5		2		1	
Long Beach, Cal	27,587	8	ļ <u>.</u> .		6		2		2 1	
LAPSIN COM	36,964	····ii	1		7		1		1	
Lynchburg, Va. Madison, Wis. McKeesport, Pa. Medford, Mass	32,940 30,699	!			3		3			
McKeesport, Pa	1 47.521	7			6		2		1	
Medford, Mass. Montclair, N. J.	26, 234 26, 318	5 8	1		U				1	
Nashia N H	27.327	8								
Newburgh, N. Y	29,603 41,133	10			6 1				2	
Newburgh, N. Y New Castle, Pa Newport, Ky	41,133 31,927	12							i	
Newport, R. I.	30, 108	8					2		;-	
Newport, R. I. Newton, Mass.	43,715 37,353	8	1		11 5				$\frac{1}{2}$	
Niagara Falls, N. Y	31,401	15 5							-	
Niagara Falls, N. Y Norristown, Pa Ogden, Utah	31,404	5 5			1		2		····i	
Orange, N. J	33,080	12	3	i	1 3	·····	2	• • • • •	1	
Pasadena, Cal	46, 450 41, 185	14 7	i		1				i	
Perth Amboy, N. J Pittsfield, Mass	38,629	7 15			39	ļ	2	· · · · · ·		
	39,651	11 9	1 1		1 2		4			
Quincy, Mass	36,798 38,136	6			5				i	
Racine, Wis	46,486	10	ļ							
Quincy, III. Quincy, Mass. Racine, Wis. Roanoke, Va. Rock Island, III. San Jose, Cal.	43, 284	12 10	2		2 3	•••••				
KOCK ISIADO, III	28,926 38,902	10			7		3		i	

DIPHTHERIA, MEASLES, SCARLET FRVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended June 23, 1917—Continued.

	Popula- tion as of July 1, 1916	Total deaths	1 -	theria.	Me	sles.		ver.		iber- losis.
· City.	(estimated by U. S. Census Bureau).	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 25,000 to 50,000 inhabitants—Continued. Steubenville, Ohio	27,445	10	2	;.			ļ			
Superior, Wis Taunton, Mass Topeka, Kans	46, 226 36, 283 48, 726	5 14 8	2	1	3 3		i			a
Waltham, Mass	30,570 29,894	9	2	i	28 23				1	
West Hoboken, N. J Wheeling, W. Va	43, 139 43, 377	8 19	1		4		2		2	····i
Williamsport, Pa Wilmington, N. C Winston-Salem, N. C	33, 809 29, 892 31, 155	18 23	6		8 1 2		i	•••••	3	1
Zancsville, Ohio From 10,090 to 25,000 inhabitants:	30,863	9		1	2		2	••••	ļ	i
Alton, Ill	22,87 4 15,010 13,532	7	1		3 1 6 1		1	•••••	···i	
Berlin, N. H Braddock, Pa	13,599 21,685	1			2 2		i	•••••	3	•••••
Cairo, Ill	15,794 1 13,075	6 7			<u>2</u>				2	1
Coffeyville, Kans	17,548 22,669 24,276				30 6				1	2
Galesburg, Hl Harrison, N. J Kearny, N. J.	16,950 23,539	4			6 10		_i			•••••
Kokomo, Ind Long Branch, N. J	20, 930 15, 395	3	····i		5				···i	
Marinette, Wis	1 14, 610 17, 445 13, 284	6	5		6				_i	i
Muscatine, Iowa. Nanticoke, Pa	17,500 23,126	5					1			•••••
Newburyport, Mass New London, Conn North Adams, Mass	15, 243 20, 985 1 22, 019	4 8 4			5 2 23		2			·····
Northampton, Mass	19, 926 23, 805	4 3			4				1	i
Pontiac, Mich	17, 524 11, 666				12		2			•••••
Rocky Mount, N. C Rutland, Va Sandusky, Ohio	12,067 14,831 20,193	6 3 6			2 15		i		1	•••••
Sandusky, Ohio Saratoga Springs, N. Y South Bethlehem, Pa	13, 821 24, 204	2	1		1				1	· · · · · · · · · · · · · · · · · · ·
Steelton, Pa Washington, Pa Wilkinsburg, Pa	15,548 21,618 23,228	3	····i		6 2				5	•••••
Woburn, Mass	15, 969	5				.				i

¹Population April 15, 1910; no estimate made.

FOREIGN.

PLAGUE ON VESSEL.

Further Relative to Steamship "Sardinia"—Port of London.1

Two additional cases of plague occurred among members of the crew of the steamship Sardinia at the port of London during the period from May 3 to 8, 1917.

CHINA.

Examination of Rats-Shanghai.

During the period from May 6 to June 2, 1917, 1,186 rats were examined at Shanghai. No plague infection was found. The last plague-infected rat at Shanghai was reported found May 6, 1916.

MEXICO.

Yellow Fever-Peto, Yucatan.

A fatal case of yellow fever was reported June 23, 1917, at Peto, State of Yucatan, Mexico. The patient had recently arrived from Mexico City.

Peto is the terminal of a railroad connecting the town with Merida and Progreso.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

Reports Received During the Week Ended July 13, 1917.2

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India: Bassein Calcutta Madras Rangoen Philippine Islands: Provinces Albay Bohol Cebu Sorsogon Tayabas	Apr. 1-21. Apr. 29-May 5. Apr. 22-28 Apr. 21-28 May 20-26. do. do. do. do.	19 19 86 43 42 1	7 56 1 7 10 42 20 15	May 20-23, 1917: Cases, 191; deaths, 88.

Public Health Reports, June 22, 1917, p. 1000.
 From medical officers of the Public Health Service, American consuls, and other sources.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received During the Week Ended July 13, 1917—Continued.

PLAGUE.

Place.	Date.	Cases.	Deaths.	Remarks.
Arabia:				
Aden Ceylon:	. May 3-14		. 24	
Colombo	. Apr. 8-May 14	33	30	· I
China: Kwangtung Province—			1	
Ta-pu district	. June 2	J		. Present.
Great Britain: London	May 3-8	2	2	In hospital at nort From a
Dollard	, May 6 0	1 ~	1 *	Sardinia from Australian and
***			İ	Uriental ports.
IndiaBassein	Apr. 1-21		31	Apr. 15-May 5, 1917: Cases, 26,206 deaths, 21,469.
Bombay	. Apr. 22-28	115	96	deaths, 21,100.
Calcutta	Apr. 29-May 5		10	
Henzada Karachi.		229	20 214	
Madras Presidency	Apr. 22-28	100	88	
Mandalay	Apr. 8–14		1	
Moulmein	Apr. 1-21		41	1 -:
Myingyan	Apr. 1-7 Apr. 15-28	52	1 51	
Rangoon	Apr. 8-14	07	2	
Siam: Bankok	Apr. 22-May 12	8	. 8	
	1 -			<u> </u>
	SMAL	LPOX.		
Canada:				
Halifax	June 18-23	2		
China: Antung	May 21-27	1		Varioloid.
Chefoo	May 20-26	_	1	varioloid.
Chungking	May 13-26			Present.
Mukden Shanghai	May 13-26. May 27-June 2 May 21-June 3	·····	9	Do.
Tientsin	May 13-26	5	9	Cases foreign; deaths among natives.
India:				
Bombay	Apr. 22-28	26	9	
Calcutta Karachi	Apr. 29—May 5		7 2	
MadrasRangoon	Apr. 22-May 5 Apr. 22-May 5	19	11	
Rangoon	Apr. 15-28	17	3	
Italy: Turin	May 21-June 3	20	8	
Japan:	may 21-3 me 3	20	0	
Kobe	May 27-June 10	19	7	
Nagasaki	May 28-June 3	1		
Osaka Philippine Islands:	May 16-June 5	114	37	
Manila	May 13-19	5		Varioloid.
Straits Settlements:	1	j	_	
PenangSweden:	Mar. 18-May 12	5	2	
Steekholm	May 20-26	1		•
	TYPHUS	FRVED	,	
		FEVER	••	
Greece: Saloniki	May 6-12		12	
	YELLOW	FEVER		
Varian		<u>-</u>		,
Mexico: Yucatan State—		- 1		•
Peto	June 23	. 1	1	In person recently arrived from Mexico City.
	1	ı	i	÷

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received From June 30 to July 6, 1917.1

CHOLERA.

Place.	Date.	Cases.	Deaths.	· Remarks.
India: Rangoon	Apr. 29-May 5	5	3	

PLAGUE.

Ceylon:	May 6-12	. 4		
China: Amoy Egypt	Apr. 29-May 5			Present and in vicinity. Jan. 1-May 17, 1917: Cases, 231;
Suez	May 12-17	4	2	deaths, 116.
Provinces— Fayoum Girgeh	May 11-17 May 17	12	6 1	
Minieh	May 12-15	2	2	
Siout	May 12	3	1	
India: Madras Presidency Rangoon	May 6-12 Apr. 29-May 5	53 23	38 21	_

SMALLPOX.

			, 	
Australia: New South Wales. Brewarrina. Quambone. Queensland— Thursday Island Quarantine Station.	Apr. 27-May 10do	2		Apr. 27-May 10, 1917: Cases, 6. From s. s. St. Albans from Kobe via Hongkeng, Vessel proceeded to Townsville, Bris-
Canada:				bane, and Sydney, in quaran- tine.
Manitoba— Winnipeg Nova Scotia—	June 10-16	!	1	
Port Hawkesbury Ceylon: Colombo	June 17-28 May 6-12			Present in district.
China: Amoy	Apr. 29-May 5 May 6-12	1		Present and in vicinity. Present. On Chinese Eastern Railway.
Harbin Hongkong Manchuria Station Mukden	Apr. 23-May 6 May 6-12 Apr. 23-29 May 20-26.	1	1	Do. Present.
Shanghai	May 14-20. Apr. 16-22. May 22-29.	2 1	7	On Chinese Eastern Railway. At another station on railway.
Egypt: Alexandria	Apr. 30-May 27	. 20	6	1 case.
India: MadrasRangoon	May 6-12 Apr. 29-May 5	11	9 1	
Portugal: Lisbon	May 13-26 Mar. 11-May 5	4 2		Jan. 1-31, 1917: Cases, 7.
Vladivostok Turkey in Asia: Trebizond.	Mar. 15-21 Feb. 25-Apr. 13	11	4 15	,, ··
Union of South Africa: Johannesburg	Mar. 12-24	4		

¹ From medical officers of the Public Health Service, American consuls, and other sources. For reports received from Dec. 30, 1916, to June 29, 1917, see Public Health Reports for June 29, 1917. The tables of epidemic diseases are terminated semiannually and new tables begun.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received From June 30 to July 6, 1917—Continued.

TYPHUS FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
China: Tsingtao Egypt: Alexandria.	May 20-29 Apr. 30-May 27	1 830	232	
Russia: Riga Vladivostok	Mar. 29-Apr. 4	2	•	Jan. 1-31, 1917: Case, 1.